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Appendix A

Comparison of the amino acid sequences of the Cysteine proteases from soybean clone sr3c.pk003.d10.fis (SEQ ID NO:24) and *Phaseolus vulgaris* set forth NCBI General Identifier No. 2511691. Amino acids conserved among the two sequences are indicated with a single asterisk above the conserved residues. Dashes are used by the program to maximize alignment of the sequences. Residues conserved in all known cysteine proteases are underlined. Amino acids in the active site and cysteines in disulfide bridges are indicated by a dot and by a triangle below the conserved residues, respectively (Karrer et al.(1993) P.N.A.S.90, 3036-3067).

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SEQ ID NO: 24  MANLSLLFFGLLLFSA-AVATVERIDDEDNLLTRQVVPDAE-DRHLINAEHHFSAPKTKF
Gi:2511691     MARYTL--CALLLFAVAARAGGASTDADDILIRQVPEGEVEDHLINAEHHFSTPKSRF

*****
SEQ ID NO: 24  AKTYATQEEHHRFRIFFQNLRLAKSHQKLDPSAVHGVTRFSDLTTPSEFRGQFLGLKPLR
Gi:2511691     GKTYATKQEEHHRFGVFKSNMRRARLHAQLDPSAVHGVTRFSDLTTPAEFHRKFLGLKPLR

** ***** ** ***** ** ***** ** ***** ** ***** **
SEQ ID NO: 24  LPSDAQKAPILPTSDLPDWDHGAIVGVKNGSCGWCWSFSAVGALEGARFLSTGGL
Gi:2511691     LPAHAQKAPILPTMNLFPKDFWRDRGAVINVKDQSGSCGSCWSFSTTGALEGARFLATGEL
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*****
SEQ ID NO: 24  VSLSEQQLVDCDEECDFEERGACDSGCGGLMTTAFETTLKAGGLMREEDYPYTGDRGP
Gi:2511691     VSLSEQQLVDCDHVCDPEEYGS CDSCGGLMNAFEYTLIGSGGVQREKDYPTTGRD-GT
                ▲

*****
SEQ ID NO: 24  CKFDKSKLAASVANPFSVSLDEEQIAANLVKNGPLAVGINAVFMQTYIGGVSCFYICGRH
Gi:2511691     CKFDKSKTAASVSNYSVLSDDEEQIAANLVKNGPLAVATNAVYMQTYVGVSCFYICGRH
                ▲

*****
SEQ ID NO: 24  LDHGVLLVGYGSGAYAPIRFKPKPYWIIKNSWGESWGEZGYIKICRGRNVCGVDSMVSTV
Gi:2511691     LDHGVLLVGYGSGAYAPIRFKPKPYWIIKNSWGENWGGNGYIKICRGRNVCGVDSMVSTV
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SEQ ID NO: 24  AAIHVSNH
Gi:2511691     GATHASTQ
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